

~~TOP SECRET~~

PRIORITY

OUT 53 7/1

P 172049Z
FM NPIC

1964 JUL 17 23 59Z

20 JUL 1964

AFSSO USAFE
AFSSO PACAF

Multi

~~HPS~~ 25X1

~~COS~~ 25X1

~~CDC~~

~~PNS~~ 25X1

~~ACE~~

CNO

Declassification Review by NGA/DoD

OPCEN
YWGLAZC/AFSSO SAC
YWGLAZC/AFSSO ACIC
YWGLAZC/AFSSO FTD
ZEM
T O P S E C R E T

25X1
Grace (File)

CONTROL SYSTEM. SSOS PASS TO APPROPRIATE TCOS. CITE NPIC 2606.

SUBJECT: CAMERA INFORMATION FOR MISSION 1008-1.

A. THIS PHOTOGRAPHY INVOLVES THE USE OF EIGHT CAMERAS: TWO MAIN CAMERAS, FOUR HORIZON CAMERAS, A STELLAR CAMERA, AND AN INDEX CAMERA.

B. OPERATIONAL FOCAL LENGTHS (MM)

HORIZON

	MAIN	PORT	STARBOARD	STELLAR	INDEX
FWD UNIT	609.551	55.13	54.71		
AFT UNIT	609.653	54.84	55.29		

C. LENS DISTORTION (PIN CUSHION) MM

DEGREES

(1)

MAIN LENS	3	2	1	0	359	358	357
FWD UNIT	.003	.002	.000	.000	.000	.002	.004

25X1

~~TOP SECRET~~

GROUP 1
Excluded from automatic
downgrading and
declassification

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AFT UNIT .002 .001 .000 .000 .000 .001 .003

(2) HORIZON CAMERAS (MM)

FWD

AFT

		PORT	STARBOARD	PORT	STARBOARD
(RADIAL)	10 DEGREES	.041	.002	MINUS .001	.006
	20 DEGREES	.088	.000	MINUS .008	.014
(TANGENTIAL)	MAX. VECTOR	.002	.002	.005	.003

D. DEPRESSION ANGLES OF HORIZON CAMERAS RELATIVE TO NOMINAL MAIN CAMERA

	PORT	STARBOARD
FWD	14 DEGREES 52' 24"	15 DEGREES 15' 12"
AFT	14 DEGREES 37' 02"	15 DEGREES 44' 58"

E. CAMERA FILTER AND EXPOSURE DATA

	MAIN	HORIZON	STELLAR	INDEX
FILTER	WRATTEN 21	WRATTEN 25	NONE	WRATTEN 21
APERTURE	F 3.5	STARBOARD F 6.8	F 1.8	F 4.5
		PORT F 8.0		

SLIT WIDTH/EXPOSURE

	.200 INCH	1/100 SEC.	2.0 SEC.	1/500 SEC.
FILM	SO 132	SO 132	SO 102	SO 130

F. RESOLUTION CAPABILITIES

(1)

(L/MM AVG)	MAIN	PORT HORIZON	STARBOARD HORIZON
FWD	178	133	115

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AFT

194

N/A

75

(2)

INDEX (L/MM AWAR) 71

G. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES PER SECOND.

H. CALIBRATED ANGLES OF CAMERAS

(1) CALIBRATED CONVERGENT ANGLE OF MAIN CAMERAS 29 DEGREES 57.72 MIN.

(2) CALIBRATED ANGLE BETWEEN STELLAR AND INDEX CAMERAS 90 DEGREES 2.58 MIN.

I. IMAGE MOTION COMPENSATION DATA

A. CYCLE RATE (CPS) AND GROUND ANGULAR VELOCITY (GAV IN RAD/SEC)

REF. LEVEL			AMPL. LEVEL		
NO.	CPS	GAV	NO.	CPS	GAV
11	0.2669	0.0241	1	0.1946	0.0176

B. PASSES: REF. 11, AMPL. 1 : 1D1 THRU AND INCLUDING 47D1.

J. PROGRAM TIME DATA

PASS	CAMERA ON TIME				PROGRAM ON TIME	PROGRAM
	(ZEBRA TIME)				UP RAMP	DURATION
	DAY	HOUR	MIN	SEC	(SEC)	(SEC)
1DE	11	00	44	26	2114	37
2D1	11	02	11	37	1881	115
3D1	11	03	41	24	1808	235

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5D1	11	06	47	38	2070	288
6D1	11	08	13	22	1756	340
6D2	11	08	21	33	2247	272
7D1	11	09	44	08	1746	161
7D2	11	09	49	23	2061	217
8AE	11	10	59	28	808	49
8D1	11	11	19	18	1999	376
9D1	11	12	49	36	1966	318
19D1	12	03	58	59	1971	173
21D1	12	07	00	04	1918	321
22D1	12	08	29	36	1834	355
22D2	12	08	37	47	2325	97
23D1	12	10	05	01	2102	82
23D2	12	10	07	00	2220	126
24A1	12	11	15	26	874	46
24D1	12	11	33	59	1987	335
25D1	12	13	06	58	2111	172
31D1	12	22	18	42	2484	83
36D1	13	05	41	19	1764	647
37D1	13	07	19	27	2198	100
38D1	13	08	43	16	1772	91
38D2	13	08	47	44	2040	201
38D3	13	08	51	40	2277	199

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39D1	13	10	20	12	2134	361
40AE	13	11	31	09	936	45
40D1	13	11	48	10	1957	512
41D1	13	13	22	23	2157	185
47D1	13	22	33	05	2471	155

NOTE: DATA IS THE SAME FOR BOTH MASTER (FWD) AND SLAVE (AFT) UNITS.

K. TIME CORRELATION (MILLISECONDS) NOT AVAILABLE AT THIS TIME.

NOTE: PARA B STELLAR INDEX FOCAL LENGTHS WILL BE FURNISHED WHEN AVAILABLE.

T O P S E C R E T

/END OF MESSAGE/

(ABOVE MESSAGE ALSO TRANSMITTED)

25X1